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(54) **METHODS AND APPARATUS FOR NAVIGATING AN IMAGE**

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    See application file for complete search history.

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(57)   **ABSTRACT**

Methods and apparatus are contemplated to perform various actions, including: zooming into or out of an image having at least one object, wherein at least some elements of the at least one object are scaled up and/or down in a way that is non-physically proportional to one or more zoom levels associated with the zooming, and wherein, for example, the non-physically proportional scaling may be expressed by the following formula: $p=d' \cdot z^a$, where p is a linear size in pixels of one or more elements of the object at the zoom level, d' is an imputed linear size of the one or more elements of the object in physical units, z is the zoom level in units of physical linear size/pixel, and a is a power law where $a \neq -1$.

17 Claims, 17 Drawing Sheets

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200─┐
┌─────────────────────┐
│ PRODUCE A PLURALITY OF│
│  IMAGES AT DIFFERING  │
│     RESOLUTIONS       │
└─────────────────────┘
          │
202─┐     │
┌─────────────────────┐
│ PROVIDE AT LEAST TWO OF│
│ THE IMAGES TO A CLIENT │
│       TERMINAL         │
└─────────────────────┘
          │
204─┐     │
┌─────────────────────┐
│   RECEIVE NAVIGATION  │
│  COMMANDS CONCERNING  │
│ e.g., PANNING AND ZOOMING│
│   OF ONE OF THE IMAGES │
└─────────────────────┘
          │
206─┐     │
┌──────────────────────────┐
│  USE BLENDING TECHNIQUES TO│
│  RENDER A NEW IMAGE AT A   │
│ RESOLUTION BETWEEN AT LEAST TWO│
│ OF THE IMAGES WHEN THE NAVIGATION│
│  COMMANDS DO NOT COINCIDE WITH │
│      ONE OF THE IMAGES         │
└──────────────────────────┘
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